

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

1. (Currently Amended) A processor comprising:

A1
a first port to receive a supply voltage from an external voltage regulator, the supply voltage to power the processor;

a voltage sensor to monitor the supply voltage; and

a second port to provide a control signal from the voltage sensor to the voltage regulator to indicate if the supply voltage is above or below a target value,
wherein the target value is to be reduced if the circuit is inactive.

2. (Original) The processor of claim 1, wherein the target value is adjustable by the processor in accordance with a power management policy.

3. (Original) The processor of claim 1, wherein the target value is to be set to allow the processor to meet a timing requirement.

4. (Canceled)

5. (Original) The processor of claim 1, wherein the voltage sensor includes an op amp.

6. (Original) The processor of claim 1, wherein the circuit includes at least a portion of a core of the processor.

7. (Original) The processor of claim 1, wherein the circuit includes a memory region.

8. (Original) The processor of claim 7, wherein the memory region is a cache.

9. (Currently Amended) A computer system comprising:
a discrete voltage regulator to provide a supply voltage; and
a processor, powered by the supply voltage, to provide a control signal to the voltage regulator to indicate a target value for the supply voltage, wherein the target value is to be reduced if at least a portion of the processor is inactive.

10. (Original) The computer system of claim 9, wherein the target value is to be adjusted by the processor in accordance with a power management policy.

11. (Original) The computer system of claim 9, wherein the target value is to be set to allow the processor to meet a timing requirement.

12. (Canceled)

13. (Original) The computer system of claim 9, wherein the target value is to be indicated by the control signal by indicating if the supply voltage is above or below the target value.

14. (Original) The computer system of claim 9, wherein the processor includes a voltage sensor to monitor the supply voltage and to provide the control signal, the voltage sensor including an op amp.

15. (Currently Amended) A method comprising:

enabling a voltage regulator to provide Vcc to a processor;
enabling the processor to receive Vcc from the voltage regulator and to send a control signal associated with Vcc to the voltage regulator, the control signal to indicate a target value; and

enabling the voltage regulator to receive the control signal from the processor, the voltage regulator to adjust Vcc to the target value in response to the control signal; and

reducing the target value if at least a portion of the processor is inactive.